

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims:

1. (currently amended) A method of generating an interleave pattern for n lots of A tasks and $(2^z - n)$ lots of B tasks, where n and z are positive integers and B equals $A + 1$, comprising:
 - creating a key comprised of the reverse bit order of a serially indexed count from 0 to 2^z ; and
 - generating an interleave pattern corresponding to said key in which all values in the key less than n are replaced by A and all other values in the key are replaced by B; and
 - distributing said n lots of A tasks and said $(2^z - n)$ lots of B tasks to a plurality of processing elements according to said interleave pattern to balance the workload across said plurality of processing elements.
2. (currently amended) A method of generating an interleave pattern for n lots of A tasks and y lots of B tasks, where n and y are positive integers, B equals A plus 1, and n plus y does not equal a power of two, comprising:
 - creating a list in which the entries are comprised of the reverse bit order of a serially indexed count from 0 to 2^z ;
 - selecting a portion of the list;
 - renumbering the selected portion of the list to form a key; and
 - generating an interleave pattern corresponding to said key in which all values in the key less than n are replaced by A and all other values in the key are replaced by B; and
 - distributing said n lots of A tasks and said y lots of B tasks to a plurality of processing elements according to said interleave pattern to balance the workload across said plurality of processing elements.
3. (original) The method of claim 2 wherein said selecting includes selecting a centered portion.
4. (original) The method of claim 2 wherein said selecting includes dropping entries alternately from each side of the list.
5. (original) The method of claim 2 wherein said renumbering includes renumbering in order of ascending value.
6. (currently amended) A method, comprising:
 - creating a key comprised of the reverse bit order of a serially indexed count from 0 to 2^z ;

creating a table of interleave patterns for all values of n lots of A tasks and $(2^z - n)$ lots of B tasks based on said key, where n is a positive integer and B equals $A + 1$; ~~and~~

storing said table; and

distributing said n lots of A tasks and said $(2^z - n)$ lots of B tasks to a plurality of processing elements according to said stored table to balance the workload across said plurality of processing elements.

7. (original) The method of claim 6 additionally comprising automatically selecting an interleave pattern from said table based on one of the values n and $(2^z - n)$.

8. (original) The method of claim 7 additionally comprising generating an interleave pattern based on said selecting.

9. (currently amended) A method, comprising:

selecting a value of 2^z which is greater than the value of n lots of A tasks plus y lots of B tasks, where n and y are positive integers and B equals A plus 1, but less than twice that value;

creating a list in which the entries are comprised of the reverse bit order of a serially indexed count from 0 to 2^z ;

selecting a portion of the list;

renumbering the selected portion of the list to form a key;

creating a table of interleave patterns for all values of n lots of A and y lots of B based on said key; ~~and~~

storing said table; and

distributing said n lots of A tasks and said y lots of B tasks to a plurality of processing elements according to said stored table to balance the workload across said plurality of processing elements.

10. (original) The method of claim 9 wherein said selecting includes selecting a centered portion.

11. (original) The method of claim 9 wherein said selecting includes dropping entries alternately from each side of the list.

12. (original) The method of claim 9 wherein said renumbering includes renumbering in order of ascending value.

13. (original) The method of claim 9 additionally comprising automatically selecting an interleave pattern from said table based on one of the values n and y .

14. (original) The method of claim 13 additionally comprising generating an interleave pattern based on said selecting.

15. (currently amended) A computer readable memory device carrying a set of instructions which, when executed, perform a method comprising:

creating a key comprised of the reverse bit order of a serially indexed count from 0 to 2^z ; and
generating an interleave pattern corresponding to said key in which all values in the key less than n are replaced by A tasks and all other values in the key are replaced by B tasks to generate an interleave pattern for n lots of A and $(2^z - n)$ lots of B, where n and z are positive integers and B equals A plus 1;
and
distributing said n lots of A tasks and said $(2^z - n)$ lots of B tasks to a plurality of processing elements according to said interleave pattern to balance the workload across said plurality of processing elements.